

# Synthesis of nitrogen-containing spirocycles via superacid reactions of imines

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Aromatic spirocycles are important scaffolds for use in organic based electronics due to their high thermal stability and unique orthogonally rigid structure. Although several reports have been published on synthetic methods for making these spirocycles, superacid acid catalyzed intramol. cyclization of intermediate imines have not been reported. In our work, we developed a new synthetic method for making spirocycles through superacid-catalyzed intramol. cyclization of intermediate imines. We propose that the superacid generates reactive diprotonated iminium ion.